

The University of Chicago

A STUDY OF
THE RELATIONSHIP BETWEEN
READING INTEREST AND
ACTUAL READING

A PART OF A DISSERTATION SUBMITTED
TO THE FACULTY OF THE GRADUATE
LIBRARY SCHOOL IN CANDIDACY FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

1932

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LEON CARNOVSKY

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ADULT READING AS A FIELD FOR STUDY

READING as a field for scientific investigation has received increasing attention since the middle of the nineteenth century. The increase in the amount of printed matter available, and its steadily growing influence upon public opinion, have directed attention to reading as an educational, psychological, and sociological phenomenon. Reading in its sociological phases has probably received less attention than reading in its educational and psychological phases, at least until recently. However, it is evident that the lines dividing the three aspects are constantly shifting, and are often disregarded in current studies.

Reading and adult education.—Within recent years the increase in the number and influence of agencies for adult education has resulted in focusing attention even more sharply upon the importance of reading in modern life. Such agencies were the outward expression of the concept that education is a continuing process and that the break marking the end of formal education is essentially artificial. This idea has received renewed emphasis within the last decade. For present purposes it is unnecessary to consider why this was so: whether the concept of adult education was precipitated by a widespread feeling of the need for greater accomplishment and intellectual attainment in a civilization which increasingly emphasized the competition between man and machine; whether it was influenced by the greater leisure induced by higher wages and shorter hours for the worker; or whether it came about through a sense of personal inadequacy in a world of rapidly changing political, economic, and moral values. Probably all these causes contrib-

uted to the development of adult education as an organized national and world-movement.

The agencies for adult education in the United States—their patronage, functions, ends, and methods—were described in a series of monographs prepared under the general direction of the American Association for Adult Education.¹ Although the monographs were useful as descriptions of methods employed by correspondence school, forums, university extension divisions, libraries, chautauquas, etc., they ignored certain fundamental questions, such as whether learning by adults was possible and along what lines it should be undertaken. In other words, they were accounts of the activities rather than attempts to evaluate their educational worth.

Perhaps the first important investigation in the field of adult learning is that of Thorndike,² who studied the effects of age upon learning. Thorndike showed that the rate of learning is not seriously retarded by increasing age, at least until the age of forty-five. "In general," said Thorndike, "nobody under forty-five should restrain himself from trying to learn anything because of a belief or fear that he is too old to be able to learn it."³

Thorndike's report, although a cornerstone of research in the field of adult learning, does not deal specifically with reading. However, Gray and Munroe⁴ undertook to summarize in one volume miscellaneous studies of adult reading that have appeared in students' theses and professional journals. The content of such studies may be suggested by the following topics:

The status of reading in American life.

The amount and character of adult reading and factors that influence it.

The reading interests of special groups of young people and adults.

The reading interests of elementary and high school pupils.

The studies reported by Gray and Munroe cover a wide range, both in method of approach and in validity of results. Perhaps

¹ *Studies in adult education* (New York, the Macmillan Co.).

² E. L. Thorndike and others, *Adult learning* (New York, 1928). ³ *Ibid.*, p. 177.

⁴ William S. Gray and Ruth Munroe, *Reading interests and habits of adults* (New York, 1929).

more than anything else, they emphasized the lack of co-ordination in studies of adult reading. Many are merely local surveys, with no important interpretations. A real need exists for an integration of fundamental studies as a prerequisite to valid conclusions and recommendations.

When the Graduate Library School was established at the University of Chicago, the field of adult reading was recognized as one directly pertinent to the primary objectives of librarianship and as a field of great social importance in itself. It was felt that cultivation of the field might serve to clarify certain fundamental objectives of public libraries, college libraries, and other agencies for the distribution of substantial literature. Upon this basis studies conducted or initiated by the school have been somewhat consciously organized with reference to a consistent plan.

Without entering fully into an analysis of the field of adult reading as such, something of its scope and character as conceived by those at the school whose interest lies in this direction may be suggested by the following outline:

- A. Reading matter available
(What reading matter exists on specific subjects for particular groups?)
- B. Reading population
(Who reads?)
- C. The demand for reading
(What do particular groups prefer to read?)
- D. The status of reading
(How does reading compare with other sources of recreation and information?)
- E. Consumption of reading
(What materials are read by specified groups on particular subjects or in particular forms—fiction, poetry, drama, *et al.*?)
- F. Effects of reading
(Do changes result from reading of specific kinds, and if so, what changes?)

The problem of reading interest.—One of the least understood and hence one of the most appropriate problems to investigate first is the question of reading demand, or the rôle of subject interest as an element in the satisfactions obtainable from read-

ing. Chicago studies of this problem were based on the clear distinction between what people actually read and the subjects in which they are most eager to read. Previous studies of reading interests usually proceeded on the assumption that people read voluntarily only what they are interested in reading, and therefore that interests are defined by actual reading. That this assumption has little to support it becomes evident as soon as some of the more obvious factors which induce reading are isolated. For the union between book and reader is a much more complex phenomenon than might appear at first glance.

One selects a book for any one or more of a variety of reasons, only one of which may be interest in the subject treated. That is to say, it is entirely possible that one may read on a subject in which one has little or no interest merely because a book was given to him or made readily accessible; or, one might fail to read on a subject of great interest because suitable material was not at hand.

Again, one may read a book because of a certain value which it has acquired through advertising or favorable reviews. On the other hand, one may fail to read it because insufficient publicity—that is, defective or inadequate advertising—failed to make its existence known.

Third, one may read a book because it is written in a style or in language that makes a direct appeal, either aesthetic or intellectual; or one may fail to read it because the literary style is unsatisfactory or the language too difficult.

Fourth, one may read a book because the contents are trustworthy; its author's reputation stamps it with a certain authority, or the scientific method upon which it is based lends a certain authenticity to its content. On the other hand, the absence of this trait may be sufficient to discount whatever favorable qualities the book may have. The failure of other studies to take these factors into consideration and the resulting logical fallacies involved have been noted by Crompton.⁵

It would be extremely hazardous, with our present limited

⁵ Margaret Crompton, "A Technique for describing the reading interests of adults" (Unpublished Master's thesis, Graduate Library School, University of Chicago, 1929).

knowledge, to attempt to say which of the factors serves best to initiate the reading process. But one fact is clear, namely, that the factors which have been mentioned as influencing reading are, with one exception, independent of the reader and are thus objective. Accessibility, advertising, authenticity, readability, can all be controlled for the benefit of the individual. The exception cannot so readily be controlled. This is, of course, interest in the subject. That is to say, the adult individual has been influenced by a number of factors, such as certain hereditary traits, education, environment, etc., which have molded his reading interests; and the problem is to understand him in terms of these interests.

The development of a technique for describing reading interests in the abstract—that is, interests defined inductively rather than deductively from actual readings—was undertaken by Waples and Crompton. The method of developing the technique and its statistical validation are described in Miss Crompton's unpublished thesis, "A Technique for describing the reading interests of adults," and also in Waples and Tyler's *What people want to read about*.⁶ At this point it is necessary only to note that it consisted essentially of having various groups indicate their relative interests on an inclusive check-list of topics.

The work of Waples and Tyler was largely concerned with applying the check-list to numerous groups and describing the resulting interest-patterns. More than 100 groups were sampled and their interests recorded. Among them were a number of groups from eight colleges, their interests differentiated in terms of sex, class, department of specialization, and other factors. However, the interests of college students as such were considered primarily as an element in the mosaic of reading interests of the general population.

Reading interests of students.—The present investigation includes a somewhat more intensive study of the reading interests of students in one institution, the University of Chicago. The students were grouped in terms of a number of new differentia, and the interests of the various groups described and com-

⁶ Chicago, 1931.

pared. Specifically, answers are sought to the following questions:

1. About what subjects are students at the University of Chicago interested in reading?
2. What is the effect of sex in differentiating reading interests of students?
3. What significant changes occur from year to year in the reading interests of students; that is, what class differences are evident?
4. How do students in different divisions of the University compare in reading interests?
5. What is the effect of intelligence in differentiating reading interests?
6. What is the effect of scholarship in differentiating reading interests?
7. What is the effect of reading habits in differentiating reading interests?

The reading interest of students classified with reference to the criteria enumerated are described in the author's dissertation,⁷ chapters iii and iv.

Reading interests and actual reading.—Attention has already been called to the several factors whose influence must be considered when the causative element in reading is sought. The studies of reading, in so far as they have attempted to get at this aspect of the reading situation at all, have started from actual reading as the effect, and worked back to apparent causes. In other words, there was the implication that reading followed certain patterns *because* of specific elements or combinations of detail in the content of the reading done. Among such studies the work of Dunn⁸ and Jordan⁹ is typical. As long as factors fundamental in bringing about a reading situation are excluded from consideration, whatever conclusions are based upon reading as effect must be qualified.

Although most of the other factors may be recognized a priori, only one attempt has been made to point out something of their relative influence. This was undertaken by Waples¹⁰ in a

⁷ "The Reading needs of typical student groups, with special attention to factors contributing to the satisfaction of reading interests" (unpublished Doctor's dissertation, Graduate Library School, University of Chicago, 1932).

⁸ Fannie W. Dunn, *Interest factors in primary reading materials* ("Teachers College, Contributions to Education," No. 113), Teachers College, Columbia University, 1921.

⁹ Arthur M. Jordan, *Children's interests in reading* ("Teachers College, Contributions to Education," No. 107), Teachers College, Columbia University, 1921.

¹⁰ Douglas Waples, "Relation of subject interests to actual reading," *Library Quarterly*, II (January, 1932), 42-70.

study of the reading of a group of factory workers. He found that by far the greatest proportion of reading was done in newspapers, and his conclusion with regard to the relation between reading interests and reading in this medium was that "the subjects preferred by either sex are the subjects on which most reading is done when they receive considerable space."¹¹

Inasmuch as the reading of books of non-fiction constituted such an insignificant proportion (2.9 per cent) of the total reading done by the group, Waples' analysis was limited to the newspaper and magazine reading. The present study undertakes, by a different technique, to study the relationship between the interests and book reading of the college students, and to identify the influence of such factors as advertising, accessibility, and readability, in bringing about reading.

Scope of the investigation.—With the development of a technique for isolating the single factor of interest, it is possible to identify discrepancies between interest and reading. It is highly desirable to identify such discrepancies, for if actual reading bears little relation to desired reading, it becomes necessary to know what obstacles prevent the readers from reading what they want.

Yet even within the scope thus defined certain limitations should be noted. The investigation is almost entirely confined to the reading interests and reading of University of Chicago students. Whether the findings reported are applicable to students in other institutions must be determined by further study. Second, while certain factors have been identified and their relation to reading satisfaction indicated by the data contained in the following discussion, such data are by no means sufficiently complete to establish their relative influence, even with regard to the group here studied, namely, students at the University of Chicago. Nor is there any reason to suppose that all of the factors of major importance have been identified. Furthermore, the evaluations are clear only when supplemented by parallel studies in adult reading; for example, investigations along the lines indicated in the outline on page 78. Until the re-

¹¹ *Ibid.*, pp. 58-60.

sults of such studies are available, the present investigation may perhaps pave the way for more thorough study in its own specific field, and may suggest applications which seem reasonable from the findings reported.

READING INTERESTS RELATED TO ACTUAL READING

The general problem.—People read what they read for various reasons. Interest in a given subject may or may not be one of them. The assumption behind the reading interest study is, of course, that of two books equally readable, equally advertised, equally accessible, but not equally interesting in subject matter to members of a specific group, the book on the more interesting subject will be more widely read. It is evident, however, that no two books are ever altogether alike in degree of readability, in extent of publicity, and in ease or difficulty of acquisition. Nor is it possible ever to maintain the constancy of the factors named, so that two books *would* be equally appealing in all respects. This becomes clear as soon as one realizes the great variety possible in methods of publicity, including as they must, in addition to commercial advertising, book reviews, displays, word-of-mouth recommendations, etc. Obviously no two books are presented even to a single group, such as college students of the same sex, in exactly the same way. It is unnecessary to labor the point with respect to readability and accessibility; the diversity in prose style and in methods of distribution are readily discernible, and emphasize the difficulty of considering any two books equal.

But if it were possible to measure, however roughly, the extent to which the objective factors have been present and thus have influenced reading, it would be possible to understand their influences as affecting reading interests. In the following discussion an approach is made to the problem of indicating and measuring certain factors whose presence or absence probably bears a definite relationship to the reading done.

The problem of measuring factors which influence reading.—Many difficulties are involved in measuring such factors. In order to determine the relationship between any one of them

and reading, one must know not only how widely that factor operates in general, but also, and in a much more important sense, how much the specific group studied is influenced by it. Thus it is not enough to know that certain titles which were widely read were also widely advertised and reviewed, made accessible, and were interestingly written. It is also necessary to know whether the group studied came in contact with the advertising matter, whether the books were made readily accessible to the members of the group, and whether the style was interesting or comprehensible to the specific group. In the absence of quantitative data with respect to these problems, it is possible only to say that these factors, by their presence or absence, had some influence on the reading of the group, but how much influence is as yet undetermined.

The study did seek to determine the relative influence of advertising, readability, and accessibility *in general*, on the assumption that the operation of these factors in the reading of college students probably followed in considerable degree their operation in the large. That is to say, it was assumed that a book which received a considerable amount of publicity attracted the attention of college students to the same degree that it attracted attention in general; a book which was generally considered readable was also so considered by college students; and a book easily accessible to the public was no less accessible to students.

Instrument used to sample non-fiction reading of students.—The first problem, then, was to sample the non-fiction reading done by the University of Chicago students. For this purpose a check-list was prepared, composed for the most part of comparatively recent titles. The students were asked to check the titles of books which they had read, either completely or in part, to state whether they had read the book in connection with school work or otherwise, and to indicate the source from which each title was obtained.

The list of titles was prepared by the following procedure:

(1) From the *Book review digest* for the years 1928, 1929, and 1930¹² the title of every popular book of non-fiction was copied on a card. About 250 titles were so noted.

(2) Since the purpose of the check-list was to relate students' reading to their subject interests, titles were selected to represent topics on the check-list of subject interests. This meant the exclusion of five classes of literature: fiction, poetry, drama, technical discussions, and general histories.

(3) The popularity of a title was determined subjectively. A title was considered popular if it had been widely advertised, reviewed, sold, and circulated through libraries. The fact that students reported considerable reading of the titles listed indicates that this method of selection is satisfactory.

(4) The next step was to classify the titles under the 117 topics on the interest check-list. When the nature of the contents was not known through personal acquaintance with the book, or could not be readily inferred from the titles, the book itself was examined and book reviews were consulted.

It is often difficult to classify a book unless the subject headings are very broad. When the world of subject matter is represented by 117 subject headings, as in the interest check-list, a book rarely fits one heading and one only. Usually it devotes some space to more or less closely related headings. Hence the classifier tried to place each title under the heading that received the most extensive treatment, ignoring the fact that other headings received some treatment in other chapters or sections of the book.

(5) Thus far the only factor considered in selecting titles was popularity. A second factor was now introduced in order to determine whether students read about topics in which they were interested, even though the acquisition of the book would require some effort. A number of titles were therefore added to the list in spite of the fact that they could not be considered generally popular. These titles represented topics of considerable interest to college groups. Examples of such titles are: Arnot's

¹² It should be remembered that this study was begun in January, 1931.

Soviet Russia and her neighbors and Gibbons' *Nationalism and internationalism*, representing Topic 21, "International attitudes"; Bakeless' *Origin of the next war* and Page's *Dollars and world peace*, representing Topic 23, "The next war"; Cheney's *The Theatre* and Nathan's *Art of the night*, representing 108, "The theater," a topic of interest to all groups of women. The question, of course, was: To what extent would books on interesting topics be read, even if they were not popular in the sense that the other titles were considered popular?

When the actual check-list was compiled, many of the original titles were eliminated, in order to reduce the list to a manageable number. The list as finally adopted contained 124 titles, representing sixty-two topics. Although most topics were represented somewhat arbitrarily by two titles each, this was not true of all topics. One topic—5, "Statesmen and politicians"—was represented by only one title, and another topic—2, "People of legend and history"—was represented by three titles. Actually, the number of titles representing each topic is not an important consideration. It was necessary only that the list contain a certain number of titles which had been widely read by students, so that subsequent analysis might account for their popularity.

The check-list of titles contained two columns in which students indicated whether the reading done was in connection with school work (that is, as a definite class assignment or for a term paper or book review) or otherwise. Since reading done in connection with school work would not ordinarily represent free individual preference, only reading done altogether independently of class assignment was recorded. Such reading was scored on a three-point scale; if half or less than half of the book had been read, a score of 1 was given; if more than half but not all, a score of 2; and if the whole book, a score of 3.¹³

The actual reading was thus reduced to a numerical basis, and since the reading interests were also expressed numerically, it was possible to introduce comparisons between reading and reading interest. Perhaps the simplest way of doing this is by

¹³ Based on the directions given for checking the amount of the book read, the scoring should properly have been 1, 3, and 4. The chances are that the mean number of

correlating actual reading scores with interest scores for the same group. This was done, in fact, and the results were very ambiguous. The resulting coefficients were very low, with a high probable error, indicating merely chance relationship between reading interest and actual reading. The reason is evident as soon as one realizes that so many factors other than interest influence the reading done by a specific group. Unfortunately, the method of correlation, concerned as it is with interests and books in the large, permits no answer with regard to the place of interest among other factors which influence reading.

Therefore, the "case-study" method was introduced, specific titles instead of individuals serving as subjects. That is to say, each title widely read by one or more groups was examined with respect to several factors which might have influenced the amount of reading done. Such titles were analyzed roughly to determine how widely they had been advertised, how accessible they had been, and how readable they might be considered. Against a background of such information the factor of reading interest was projected, to see how the interest of the group in the topic represented by the specific title was related to the amount of reading reported for this title.

No attempt was made to study in this way all the titles on the list. Most of them were read by too few persons, considering the size of the samples, to yield significant scores—that is, scores which could be considered representative of the group samples.¹⁴ The titles analyzed represented the following types:

pages read by those who read half or less than half would be 25 per cent of the book. The discrepancy in scoring was checked by scoring the reading of two groups in both ways, and correlating the resulting total scores. The correlation coefficients were:

Senior men	.993 ± .002
Sophomore women	.996 ± .002

These correlations are so high that it is safe to infer the validity of the simpler method.

¹⁴ As will presently be explained, the average, or mean, scores of the group, representing the reading of specific titles, were used as the basis for comparison. The probable error of the mean indicates to what extent the mean may be considered representative of the group; that is, when the statement is made that the mean is four times its probable error, it indicates the chances are 142 to 1 that the true mean lies within the limits described by four probable errors above and below the mean of the sample. The chances

(1) titles whose reading scores fell in the upper fifth of the entire list for at least three groups of the same sex; (2) titles not widely read, but comparable in subject matter to titles in group (1); (3) titles not widely read, but representing topics of considerable reading interest.

Methods of measuring advertising, accessibility, and readability.—Three measures of advertising were used. One was the amount of space given during 1928–30 to each of the titles analyzed. This measure was not complete. Three monthly periodicals, the *Atlantic monthly*, *Harpers*, and the *American mercury*, and one weekly publication, the *New York Times book review*, were examined, and the number of square inches devoted to each title was reported. The years 1928–30 were selected because most of the titles analyzed were published during this period, and since the returns were collected in January, 1931, publicity given any title after this date had no effect on reading at the time the check-lists were distributed. Since book reviews are undoubtedly an important publicity factor, the reviews appearing in the magazines which were examined for advertising were noted. A third consideration was whether the title had been selected by either of the two leading book clubs, the Literary Guild and the Book-of-the-Month Club. How much influence this factor exerted is unknown, but it is safe to assume that if selection had any influence upon reading, it was positive. This factor is also worth considering in connection with accessibility. These measures are rough, but they serve to indicate in a general way the relative amount of publicity given the selected titles.

The measure of accessibility was based on the *American Library Association booklist*. This publication is issued monthly and is widely used by libraries as a guide in the purchase of new books. Thus it is assumed that a title which has appeared in the *Booklist* is more likely to be purchased by public libraries in general than one which has not been listed. This reasoning is

are 21 to 1 that the true mean lies within the mean of the sample, plus or minus three probable errors; and the chances are 1,310 to 1 that the true mean lies within the mean of the sample, plus or minus five probable errors.

based on the further assumption that college students depend on public libraries for much of their reading. This assumption is partially checked in the study of sources, where it is shown that students depend to a considerable extent for their reading matter on libraries other than the university library.

To construct even a rough criterion for readability is most difficult of all. As a determinant of readability the opinions of reviewers, where available, were considered. Although this criterion is obviously subjective and likely to vary with reviewers, it was particularly useful where the reviewers were in agreement.

The factors which have been pointed out as affecting reading are present in all books, though their influence varies with readers. They are not, of course, *all* the factors. Therefore attention is called, in the following discussion, to other possible influences, such as the author's reputation, the attractiveness of the title, and the date of publication.

ANALYSIS OF STUDENTS' READING

The following analyses are based in large part on the mean scores of the separate titles for each of eight groups; that is, sex groups from each of the four classes in the college. The titles included in the following analysis consist of those most widely read and of those representing the same topics, even though not widely read. One further point should be made clear. In the following discussion the amount of reading done is often referred to as "much" or "little." Since no criteria have been recognized in terms of which any quantity of reading may be considered great or small, the amount of reading should properly be described in terms of more or less. And since all the analyses are based on comparative scores, "more reading" and "less reading" are meant when "much reading" or "little reading" are mentioned. Also, when the phrase "wide reading" is used it should be interpreted as indicating that the title in question was ranked among the highest fifth of the check-list.

We are now ready for analysis by "case study," remembering that the fundamental point to be established is the extent to

which reading reflects interest, and where no connection is discernible, to suggest possible reasons.

TABLE I

COMPARISON OF READING AND READING INTEREST

(Titles representing topics of relatively high interest to all groups)

Reading indicated by mean scores for each group

Reading interest indicated by decile rank for each group (1 is high; 10 is low)

Decimal point precedes all probable errors

AUTHOR AND TITLE	FRESHMEN		SOPHOMORE		JUNIOR		SENIOR	
	Men	Women	Men	Women	Men	Women	Men	Women
Beard, <i>Whither mankind?</i>	.17±.04	.21±.06	.35±.06	.37±.07	.39±.06	.40±.06	.42±.06	.41±.07
Chase, <i>Men and machines</i>	.11±.03	.10±.04	.28±.06	.12±.05	.30±.05	.09±.03	.33±.06	.12±.04
68. Modern civilization	2	3	2	1	1	1	2	1
Byrd, <i>Skyward</i>	.30±.05	.58±.09	.54±.08	.23±.06	.38±.06	.28±.06	.38±.06	.28±.07
Kingsford-Smith, <i>Flight of Southern Cross</i>	.13±.04	.03±.02	.22±.06	.12±.05	.12±.03	.03±.02	.14±.04	.01±.01
49. Developments in aviation	2	2	1	3	1	4	3	4
Lippmann, <i>Preface to morals</i>	.23±.05	.10±.04	.40±.07	.48±.08	.31±.05	.61±.06	.37±.06	.51±.08
Haydon, <i>Quest of the ages</i>	.04±.02	.09±.04	.06±.03	.14±.05	.07±.03	.17±.04	.05±.02	.05±.02
97. Religion and the world today	4	3	5	2	3	3	5	3
Dimnet, <i>Art of thinking</i>	.18±.04	.56±.09	.27±.05	.49±.08	.32±.05	.32±.06	.44±.07	.47±.08
Clarke, <i>Art of straight thinking</i>	.06±.02	.14±.04	0	.08±.04	.05±.02	.04±.02	.03±.02	.03±.02
61. Self-improvement	2	3	5	3	5	3	5	3
Dorsey, <i>How and why of human behavior</i>	.11±.03	.25±.06	.14±.04	.22±.05	.22±.05	.25±.05	.20±.05	.33±.07
Menninger, <i>Human mind</i>	.13±.03	.15±.05	.06±.03	.08±.03	.03±.02	.07±.03	.14±.04	.11±.04
58. Nature of human nature and intelligence	1	1	1	1	2	1	1	1
Halliburton, <i>New worlds to conquer</i>	.34±.05	.54±.09	.37±.07	.34±.07	.42±.06	.34±.06	.35±.06	.36±.07
Franck, <i>Vagabonding through changing Germany</i>	.02±.02	0	.26±.06	.11±.04	.04±.02	.08±.03	.10±.03	.11±.04
110. Travel and outdoor life	2	4	2	5	3	3	4	4
Niles, <i>Condemned to Devil's Island</i>	.37±.06	.51±.08	.51±.08	.47±.08	.41±.06	.30±.06	.28±.06	.21±.06
Sullivan, <i>Rattling cup on Chicago crime</i>	.04±.02	.01±.01	.10±.04	.01±.01	.10±.03	.03±.02	0	0
85. Criminals and treatment of criminals	5	4	3	2	3	3	3	4
Bonsels, <i>An Indian journey</i>	.02±.02	.07±.03	.08±.04	.08±.04	.03±.02	.06±.03	0	.08±.04
46. Interesting places abroad	1	1	1	1	2	1	2	1
Collins, <i>The Doctor looks at marriage and medicine</i>	0	.10±.04	.04±.03	.04±.03	.13±.04	.28±.06	.14±.03	.12±.04
114. Successful marriage	2	3	3	1	2	2	1	3
Eddington, <i>Nature of physical world</i>	.11±.04	.04±.03	.12±.04	0	.12±.03	.09±.03	.11±.03	.03±.02
Jeans, <i>Universe around us</i>	.08±.03	0	0	.04±.03	.08±.03	.03±.02	.10±.03	.03±.02
46. Facts and theories of science	3	3	2	4	3	3	1	3

Titles representing topics of relatively high interest to all groups (See Table I).—Topic 68, "Modern civilization," ranked at or above the third decile by all eight groups, was represented on the check-list of titles by Beard's *Whither mankind* and Chase's

Men and machines. Beard was widely read by all groups; Chase, on the other hand, was widely read by three of the four groups of men, and only very little by the women. In all cases Beard was read somewhat more extensively than was Chase. Several reasons for this may be suggested. One is the date of publication of each; *Whither mankind* was published in November, 1928, and *Men and machines* in July, 1929. Another is the greater amount of commercial advertising given Beard's book; 535 square inches in the *New York Times book review* as compared with 132 given Chase's; and 102 in *Harpers* and the *Atlantic monthly* as compared with 16. Other possible contributing factors were the selection of *Whither mankind* by the Book-of-the-Month Club, and the more extensive reputation of its author among students. There still remains the question why Chase was read so much less by the women than by the men, since the above factors would be expected to affect both sexes equally. However, the probable error of the difference of the mean scores on Chase's book, as between the sexes, is not significant. If the differences evident are not entirely due to chance, they may possibly be explained on the basis of the title of Chase's book, which seems to point more definitely to masculine interest.

In general, the reading of the Beard and Chase books, especially the Beard, may be said to reflect indications of reading interest. The correspondence is far from perfect, but it is nevertheless positive. This is not to imply, of course, that a causal relationship existed between interest and reading, but it does indicate that a relation between interest and reading can be established when certain other factors are present.

To a somewhat less degree the same reasoning is applicable in analyzing the reading of the two titles representing Topic 49, "Developments in aviation." This topic, ranked at or above the fourth decile by all eight groups, was represented by Byrd's *Skyward* and by the *Flight of the Southern Cross*, by Kingsford-Smith and Ulm. There is some question about how well these titles represent the topic, inasmuch as reading in them was probably motivated in considerable measure by the fictional element prominent in both books. However, regardless of cause

or motivation, it is evident from the table that the Byrd title was comparatively well read by all groups. The *Flight of the Southern Cross*, on the other hand, was not.

As in the preceding analysis, so here certain factors were present which probably contributed heavily in causing the first book to be read so much more widely than the second. Of these the following may be pointed out: Byrd's reputation and nationality, greater publicity given both the actual flight and the book, and earlier date of publication (1928 as against 1929).

The sex differences in the reading of Byrd are not significant. The widest difference was between the Sophomore men and women, $.31 \pm .10$, the men making the higher score; this difference is also reflected in the relative interest of the two groups. However, the difference in interest rating is not significant.

The reading of five additional titles, representing five topics, may be explained in much the same way as was the reading of the titles already discussed. These titles fall in this group because they were widely read and they represented topics of generally high interest to practically all groups. The titles and certain contributing causes of their popularity are:

Lippmann, *Preface to morals*

Author's reputation

Publicity

Favorable reviews

Book club selection (Book-of-the-Month Club)

Accessibility

Dimnet, *Art of thinking*

Publicity

Favorable reviews

Readability

Accessibility

Dorsey, *How's and whys of human behavior*

Author's reputation

Publicity

Favorable reviews

Readability

Accessibility

Halliburton, *New worlds to conquer*

Author's reputation

Publicity
 Readability
 Accessibility
 Niles, *Condemned to Devil's Island*
 Publicity
 Favorable reviews
 Readability

It is unnecessary to present an elaborate explanation of the reasons why other titles on corresponding topics were not widely read. In general, it will be found that the factors enumerated above were not present to a sufficiently great extent to stimulate extensive reading.

The evidence indicates that books on topics of high interest were read when the factors of advertising, accessibility, readability, and reputable authorship were also present. This is not true always, however. Among the titles included on the check-list there were four in which all the above factors could be identified, and yet they were not widely read. These titles and the topics they represent are:

Eddington, <i>Nature of the physical world</i>	}	...46. Facts and theories of science
Jeans, <i>Universe around us</i>		
Bonsels, <i>An Indian journey</i>		78. Interesting places abroad
Collins, <i>The Doctor looks at marriage and medicine</i>		114. Successful marriage

All four books were widely advertised and favorably reviewed; one (Bonsels') was selected by a book club, the Literary Guild; and the other three were written by authors of considerable reputation. How, then, account for the fact that they were read by so few students, in spite of the widespread interest in this subject?

Before possible reasons are suggested, it should be pointed out that in almost every case the mean score was not reliable, and therefore could not be considered representative of the group's reading of the specific title. It is therefore quite possible that the groups did much more reading of these titles than was indicated by the samples. However, if the samples are at all representative, several reasons might be suggested for the little reading reported.

One might be that the books were not read because they were not accessible to the groups reporting. However, no reason is evident why these books should be less accessible than others on which considerable reading was reported. Another might be that the considerable number of readable books available on these topics reduced the chances of the specific titles listed being read. Still a third possibility is that the interest indicated had special reference to magazine or newspaper reading, and was not carried over to books. This possibility, of course, applies to each topic on the list.

It is possible to suggest another explanation why Eddington and Jeans were not widely read. These titles represent Topic 46, "Facts and theories of science." As university students all the groups sampled come in contact in their classes with sufficient reading matter on this topic to satisfy their interest. Therefore, although their interest in this topic is altogether genuine, it is largely satisfied in their regular classwork.

Titles representing topics of varying degrees of interest—biographies (See Table II).—Except for the four titles just noted, the evidence presented covers books widely read and representing topics of high interest. If, now, books are widely advertised, well-written, and easily accessible, but on relatively uninteresting topics, may reading be expected to follow? Evidence permitting an answer to this question was available in the data on the reading of several of the other titles included on the list.

Topic 7, "Artists and musicians," was represented on the titles list by Duncan's *My life* and Rolland's *Beethoven the creator*. The four groups of men all expressed relatively little interest in this topic, but the four groups of women showed considerably greater interest, all of them ranking it in the upper half of the list. To what extent was the sex preference reflected in actual reading? An answer is suggested in the reading of the Duncan title, where it is found that the women all scored very high and the men very low. It is impossible to determine from the present data how significant the difference in the reading of this title by the sex groups was, because the mean scores for the men are not reliable. In spite of the fact, however, that the differ-

ences in the means cannot be indicated with statistical certainty, they are wide enough to indicate a strong probability that the book was much more widely read by women than by men students.

The difference in the reading of *My life* cannot be attributed exclusively to the factor of interest, although interest doubtless

TABLE II

COMPARISON OF READING AND READING INTEREST

(Titles representing topics of varying degrees of interest—Biographies)

Reading indicated by mean scores for each group

Reading interest indicated by decile rank for each group (1 is high; 10 is low)

Decimal point precedes all probable errors

AUTHOR AND TITLE	FRESHMEN		SOPHOMORE		JUNIOR		SENIOR	
	Men	Women	Men	Women	Men	Women	Men	Women
Duncan, <i>My life</i>	.06±02	.49±09	.14±04	.56±09	.08±03	.57±07	.10±03	.40±08
Rolland, <i>Beethoven the creator</i> ...	.06±02	.18±05	.05±02	.12±04	.03±02	.14±04	.04±02	.21±06
7. Artists and musicians....	8	3	8	3	9	5	9	2
Lewis, <i>François Villon</i>	.07±03	.34±07	.30±06	.51±09	.11±03	.31±06	.19±05	.33±07
Lewisohn, <i>Mid-channel</i>	.24±05	.13±05	.08±04	.38±08	.33±06	.40±06	.19±05	.27±07
8. Authors.....	6	1	7	1	7	2	8	1
Hackett, <i>Henry VIII</i>	.22±04	.45±07	.41±07	.74±10	.25±05	.74±08	.29±06	.71±09
Maurois, <i>Disraeli</i>	.58±07	1.28±12	.90±10	.93±11	.73±08	1.15±09	.77±09	1.20±11
Strachey, <i>Elizabeth and Essex</i> ...	.15±04	.68±10	.19±05	.70±10	.21±05	.72±08	.26±06	.73±10
2. People of legend and history.....	4	3	3	3	2	1	4	2
Smith, <i>Up to now</i>	.12±03	.11±04	.12±04	.08±03	.15±04	.05±02	.29±06	.09±03
5. Statesmen and politicians.	7	10	5	8	3	7	7	9
Ludwig, <i>Son of man</i>	.16±04	.20±06	.12±04	.27±07	.16±04	.21±05	.25±05	.21±06
Dakin, <i>Mrs. Eddy</i>	.08±02	.10±04	.10±04	.04±03	.11±03	.21±05	.08±03	0
10. Educators and religious leaders.....	10	8	9	8	8	7	9	8
Vandercook, <i>Black majesty</i>	.12±04	.11±04	.24±06	.18±05	.24±05	.18±04	.10±04	.24±06
Woodward, <i>Meet General Grant</i> ..	.18±04	.18±05	.26±06	.36±07	.09±03	.19±05	.10±03	.15±05
12. Military and naval heroes	8	9	8	10	8	10	9	9

played a part. From the data present one cannot determine to what extent differences in accessibility and advertising made for the difference in actual reading, but these are objective factors which there is no reason to believe operated more strongly upon one sex group than upon the other. The book was readable, in the sense of style and comprehension, to all students; it was advertised in media which reached both sexes alike; it was equally accessible to men and women.

The other title representing Topic 7 was Rolland's *Beethoven*

the creator. This title was read so little by all groups that the resulting scores are not helpful. However, it is interesting to note that in each of the four classes, the groups of women read this title more extensively than did the corresponding group of men.

The difference in the reading of Duncan and Rolland was due to several factors:

(1) *My life* was published almost two years before *Beethoven*.

(2) *My life* was much more extensively advertised. The monthly periodicals examined showed thirteen square inches for the former and thirty-eight for the latter, but the *New York Times book review* contained 227 square inches in 1928 alone for *My life* as compared with a total of seventy square inches for *Beethoven*.

(3) The factor of the personalities involved (Duncan and Beethoven) was probably of considerable influence. This point is explained on page 100, and therefore is not elaborated here.

Similar to the evidence just presented are the data on the reading of the titles representing Topic 8, "Authors." These titles were *François Villon* by D. B. Wyndham Lewis and *Mid-channel* by Ludwig Lewisohn. Topic 8 was ranked very high by all groups of women and low by the groups of men, and the reading of both *Villon* and *Mid-channel* generally reflected the indications of interest. The one exception was the reading of *Mid-channel* by the freshmen class, where the mean score of the men was greater than that of the women. In the case of the Lewis title, the means for the male groups were consistently lower than the means for the groups of women. The differences in the mean scores were:

Freshmen men and women	.27 ± .08
Sophomore men and women	.21 ± .11
Junior men and women	.20 ± .066
Senior men and women	.14 ± .08

As already noted, the freshmen men indicated more reading of Lewisohn than did the freshmen women. The difference of the means was $.11 \pm .07$, and was thus probably due to chance

factors in the sampling. The differences in the means of the other three class groups were:

Sophomore men and women.....	.30 ± .08
Junior men and women.....	.07 ± .08
Senior men and women.....	.08 ± .08

Although the means for the groups of women are all higher, they are not significantly higher, and the same may be said about the reading of the Lewis title. The differences are not great enough to permit interpretation.

Thus far the analysis of reading has been based on four biographies. It so happened that they represented topics in which women expressed great interest and men relatively little interest. Two questions were next suggested:

(1) May the differences in actual reading be attributed to differences in interest: or are they due to the biographical form? In other words, regardless of the subject of the biography, is the *form* rather than the *content* the motivating factor?

(2) If the biographical form is a significant sex differential in reading, can reading be shown to bear a significant relationship to interest when biographies are omitted from consideration; that is, when books in general covering a wide range of subject matter are considered?

Data permitting answers to these questions were next examined.

In addition to the biographies already discussed, the list of titles included the following:

Hackett, *Henry VIII*
 Strachey, *Elizabeth and Essex*
 Maurois, *Disraeli*
 Smith, *Up to now*
 Ludwig, *Son of man*
 Dakin, *Mrs. Eddy*
 Vandercook, *Black majesty*
 Woodward, *Meet General Grant*
 Corti, *Rise of the House of Rothschild*
 Winkler, *John D.: a portrait in oils*

These biographies are on topics of approximately the same degree of interest to men and women students; therefore, if sig-

nificant differences appear in the amount of reading when sex groups are compared, this would indicate a preference for the biographical form rather than for reading-matter reflecting subject interest. In other words, if such factors as advertising, accessibility, readability, and interest are constant for both sex groups, and if the reading of one group is significantly greater than the reading of the other group, this may be taken as evidence that the form, not the subject matter, is responsible for the marked sex preference.

The Hackett, Strachey, and Maurois biographies were classified under Topic 2, "People of legend and history," which was ranked in interest at or above the fourth decile by all groups. The mean scores on Hackett's *Henry VIII* by the eight groups indicate more reading of this title by the women than by the men. The differences in the mean scores and their probable errors were:

Freshmen	.23 ± .08
Sophomores	.33 ± .12
Juniors	.49 ± .09
Seniors	.42 ± .11

The difference in the reading as between men and women is most clearly marked in the case of the juniors, where the difference is more than five times the probable error, but even for the other class groups the difference is considerable, being almost four times the probable error for the seniors, and just under three times for the freshmen and sophomores. Thus the reading of this title indicates clearly a preference on the part of the women for the biographical form, and the indications of interest are probably irrelevant, as far as the present title is concerned.

That is to say, when the biographical form is omitted from consideration, no reason is evident why the book should be read more widely by one sex than by the other. Such factors as inhere in the book—readability, author's style, adequacy of treatment—should not influence one sex more than the other; as far as can be judged, the book was made equally known and accessible to both sexes; and the interest topic rating covering this

book was high for both men and women students. Only when the hypothesis of biographical form is introduced is an explanation of the discrepancy in actual reading between the sexes possible.

The data on Strachey's *Elizabeth and Essex* are essentially the same as the data on *Henry VIII*, except that the differences are even more strongly emphasized. They are as follows:

Freshmen	.53 ± .11
Sophomores	.51 ± .11
Juniors	.51 ± .09
Seniors	.47 ± .116

The differences are all significant, being well over four times the probable error.

Finally, Maurois' *Disraeli* gives evidence of greater reading by the women than by the men, although here the differences are not so great as the differences in the reading of the two biographies just discussed. The differences in the means were:

Freshmen	.70 ± .14
Sophomores	.03 ± .14
Juniors	.42 ± .12
Seniors	.43 ± .14

Only in the case of the freshmen is the difference greater than four times the probable error, and in the case of the sophomores it is altogether insignificant. Plainly, the biographical form alone is not sufficient in all cases to induce greater reading by the women than by the men.

At least one significant fact remains unexplained in the above analysis, and that is the much greater amount of reading of *Disraeli* than of either of the other two biographies. This is true for all eight groups. As far as available evidence indicates, advertising of the commercial type was not responsible, for the amount of space given to Maurois' book in the media examined was actually less than was given to either Hackett's or Strachey's (402 square inches to 621 and 438 respectively. It should be remembered, however, that this space count covers only three monthly periodicals and one weekly). On the other hand, it is altogether possible that the wide showing of the mo-

tion picture *Disraeli*, based on Louis N. Parker's play, accounted in considerable measure for the popularity of the Maurois biography. The extent to which this influence was exercised cannot be determined, but even if the influence was negligible, it is still possible to suggest a reason for the book's greater popularity than the other two biographies which were classified under the same topic. The personalities who are the subjects of the three biographies may perhaps furnish a clue.

In the field of biography it is probably not enough to say that reading preferences are in terms of certain generalized groupings, such as "People of legend and history," "Statesmen and politicians," "Artists and musicians," etc. The motivating influence would more likely be the individual whose life is written about. Thus, in the case of the three biographies classified on the titles-list under "People of legend and history," there is a strong presumption for considering *Disraeli*'s career more interesting than the others. If this reasoning be accepted, considerable doubt is cast upon the use of the biographical section of the check-list for predictive purposes.

The data with regard to the seven remaining biographies on the list of titles add nothing new to the analyses already made. The sex differences which were found in the reading of the biographies by Duncan, Rolland, Lewis, Lewisohn, Hackett, Strachey, and Maurois are not present in the reading of the other biographies, but this may be due to the fact that in most cases the amount of reading reported by the groups on the specific titles could not be taken to represent the whole group; that is, the means were not sufficiently greater than their probable errors to justify using them as bases for interpretation. However, in the few cases where the means were representative, the difference in amount of reading as between the sexes was insignificant.

Whether the evidence just presented concerning biographies is conclusive depends upon the answers to these questions: (1) Can the reading of the biographies included on the check-list be considered typical of the reading of biographies in general? (2) Are the reading differences due to sex peculiar to biographies

alone, or do they appear when the reading of other types of literature is analyzed? When the method by which the biographies were selected is considered, there is every reason for believing them representative. It is unlikely that any biography published during 1928-30 was read more widely by the groups sampled than were such books as Maurois', Duncan's, Strachey's, and Hackett's.

As pointed out, the biographical form probably appeals more to women than to men students, although this conclusion does not apply to all biographies. The factors which have been named as influencing reading operate no less in the case of biographies, and may tend to obliterate evidence of preference caused by or allied with sex. The data on the most frequently read biographies bring out most clearly and conclusively the differences due to sex, whereas the data on little-read biographies place little emphasis on such differences. The reading of certain other titles on the list was next examined for evidence with regard to a connection between interest and reading when the biographical form was completely eliminated.

Titles representing topics of varying degrees of interest—general non-fiction (See Table III).—Of the topics represented on the titles list, two were found in the interest-study to be of significantly greater interest to all groups of women than to all groups of men. These topics are 71, "Changing status of women," and 81, "Customs of others days and lands."

Topic 71 was represented on the list by Woolf's *Room of one's own* and Langdon-Davies' *Short history of women*. The latter title was read by so few students of either sex that comparisons based on it are untrustworthy. The Woolf title, on the other hand, was read much more by the women than by the men. For the freshmen, juniors, and seniors, the difference is significant.

Although there are not sufficient data on hand to account for the difference in amount of reading as between the two books representing this topic, it is probable that the reputation of Mrs. Woolf and the charm of her style are contributing causes. But these two factors, as well as such additional factors as advertising and accessibility were constant for both sexes. Thus,

there is a strong presupposition for the interest factor being responsible for the differences in amount of reading reported on the Woolf title.

TABLE III

COMPARISON OF READING AND READING INTEREST

(Titles representing topics of varying degrees of interest—General non-fiction)

Reading indicated by mean scores for each group

Reading interest indicated by decile rank for each group (1 is high; 10 is low)

Decimal point precedes all probable errors

AUTHOR AND TITLE	FRESHMEN		SOPHOMORE		JUNIOR		SENIOR	
	Men	Women	Men	Women	Men	Women	Men	Women
Woolf, <i>Room of one's own</i>	0	.21±06	.06±03	.10±04	.03±02	.28±05	0	.47±08
Langdon-Davies, <i>Short history of women</i>	.02±02	.13±04	.04±03	.04±03	.05±02	.04±02	0	.04±03
71. Changing status of women..	8	1	9	3	7	2	8	2
Mukerji, <i>Son of Mother India answers</i>	.06±02	.18±05	.19±05	.29±07	.22±05	.29±06	.16±04	.16±05
Phillips, <i>Life and labor in the old South</i>	0	0	.04±02	.04±03	.03±02	0	.03±02	0
81. Customs of other days and lands.....	7	1	4	2	5	2	5	1
Beebe, <i>Beneath tropic seas</i>	.29±05	.14±05	.45±08	.04±02	.29±05	.26±05	.20±04	.16±05
Yonge, <i>Queer fish</i>	0	0	0	0	.03±02	0	.03±02	.03±02
66. Marine life.....	8	9	8	9	9	9	9	9
Darrow, <i>Crime: cause and treatment</i>	.09±03	.04±03	.24±06	0	.18±04	.12±04	.20±05	.08±03
Dilnot, <i>Triumphs of detection</i>	0	0	.03±02	0	.02±01	0	.11±04	0
83. Detection and prevention of crime.....	1	4	1	3	1	3	1	3
Work, <i>Contract bridge for all</i>	.16±04	.06±02	.17±05	.25±03	.18±04	.18±04	.20±05	.27±05
Lenz and Rendel, <i>How's your bridge?</i>	.04±02	0	.05±02	.08±04	.04±02	.04±02	.11±04	0
111. Hobbies and use of leisure..	6	7	5	6	8	5	7	6
Shaw, <i>Intelligent woman's guide to socialism and capitalism</i>	.07±02	.08±03	.13±04	.19±05	.13±03	.26±05	.19±05	.28±06
Martin, <i>Liberty</i>	.03±02	.04±03	.07±04	.03±02	.07±02	.06±03	.04±02	.04±03
67. Theories about society and social progress.....	7	6	6	5	8	5	4	4
Merriam, <i>Chicago</i>	.15±04	.15±05	.14±04	.26±06	.23±05	.23±05	.19±05	.23±06
Werner, <i>Tammany Hall</i>	.07±02	.03±02	.14±04	.03±02	.13±03	.10±03	.11±03	.04±03
17. Problems of city government	6	7	4	8	4	7	4	8
Russell, <i>Marriage and morals</i>	.08±03	.25±06	.23±05	.23±05	.34±06	.38±05	.37±06	.53±08
Tanner, <i>Intelligent man's guide to marriage and celibacy</i>	.03±02	0	0	.04±03	.04±02	0	0	.11±04
88. Comments on marriage and divorce.....	8	6	6	5	7	4	6	3
Merz, <i>Great American bandwagon</i> ...	.18±04	.07±03	.18±05	.21±06	.19±04	.22±05	.16±04	.27±06
Lynd, <i>Middletown</i>	.02±02	0	.03±02	.08±04	.13±03	.17±04	.06±03	.08±03
69. Comments on modern America.....	7	5	5	5	6	5	5	4

The evidence is not so clear with respect to reading on the next topic to be considered: 81, "Customs of other days and lands." This topic is represented by Mukerji's *Son of Mother India answers* and Phillips' *Life and labor in the old South*. The

Phillips book, like the Langdon-Davies, was not sufficiently read to permit analysis.

As already pointed out, Topic 81 is relatively more interesting to the women than to the men. This difference is reflected in the mean scores for the reading of Mukerji's book by all classes except the senior, where the mean score is identical for the men and women. However, the differences are not sufficiently wide to permit the conclusion that the relationship between interest and reading is positive.

The reasons for the wide differences in the reading of Mukerji and Phillips are similar to reasons already advanced, where two books on the same topic differed materially in the number of their readers. Perhaps of strongest influence in the greater popularity of Mukerji was the fact that the book was written in answer to Katherine Mayo's *Mother India*, which attracted a large audience and awakened considerable interest in the social and religious customs of India.

There were a number of additional topics which were ranked three or more deciles apart by all groups of men and women, and several of these topics were represented by titles on the list. However, such titles were read by so few students that the data were not usable. On the other hand, certain titles on the list were read by a sufficient number in some groups to warrant examination of the resulting data. These titles were:

Beebe, *Beneath tropic seas*
 Darrow, *Crime*
 Byrd, *Skyward*
 Lippmann, *Preface to morals*
 Dimnet, *Art of thinking*
 Dorsey, *Hows and whys of human behavior*
 Halliburton, *New worlds to conquer*
 Work, *Contract bridge for all*
 Shaw, *Intelligent woman's guide to socialism and capitalism*
 Merriam, *Chicago*
 Niles, *Condemned to Devil's Island*
 Russell, *Marriage and morals*
 Chase, Schlink, *Your money's worth*
 House, *Intimate papers*

TABLE IV
COMPARISON OF READING AND READING INTEREST
(Titles representing topics ranked three or more deciles apart in interest)
Decimal point precedes all probable errors

AUTHOR AND TITLE	FRESHMEN		SOPHOMORES	
	Men	Women	Men	Women
Darrow, <i>Crime</i>	.09±03	.04±03		
83. Detection and prevention of crime.....	1	4		
Lippmann, <i>Preface to morals</i>			.40±07	.48±08
97. Religion and world today....			5	2
Halliburton, <i>New Worlds to conquer</i> ..			.37±07	.34±07
110. Travel and outdoor life.....			2	5
Merriam, <i>Chicago</i>			.14±04	.26±06
17. Problems of city government..			4	8
	JUNIORS		SENIORS	
	Men	Women	Men	Women
Byrd, <i>Skyward</i>	.38±06	.28±06		
49. Developments in aviation....	1	4		
Work, <i>Contract bridge for all</i>	.18±04	.18±04		
111. Hobbies and use of leisure....	8	5		
Shaw, <i>Intelligent woman's guide to socialism and capitalism</i>	.13±03	.26±05		
67. Theories about society and social progress.....	8	5		
Merriam, <i>Chicago</i>	.23±05	.23±05	.19±046	.23±055
17. Problems of city government..	4	7	4	8
Russell, <i>Marriage and morals</i>	.34±055	.38±05		
88. Comments on marriage and divorce.....	7	4		
Chase, Schlink, <i>Your money's worth</i> ..			.34±06	.08±04
29. Prices and costs of living....			4	8
House, <i>Intimate papers</i>			.23±05	.19±05
20. United States foreign affairs..			2	6

Of these, the titles in Table IV represented topics which sex groups of the same class ranked three or more deciles apart in interest. The groups, mean scores, and decile ranks for interest are also indicated.

With but three exceptions, in every instance, where one sex group indicated significantly greater interest in the topic than had the other, the mean reading score was greater for that group. This, however, is not so significant as might appear, because in no case, including the exceptions noted, was the difference in reading significant. The greatest difference is in the reading of the Chase and Schlink title by the senior groups, but the mean score for the women is not reliable and therefore cannot be used in the comparison. Additional comparisons of the above titles between members of the same class, but of different sex, do not yield significant differences. Only in the reading of Lippmann's *Preface to morals* by the juniors is the difference considerable: $.30 \pm .08$, the higher score being the women's. One possible explanation for this is the title, and perhaps part of the contents, in so far as they suggest and reflect the topic "Public morals," which is ranked two deciles higher by the junior women than by the junior men (fifth and seventh).

Data have now been presented covering topics of high interest and considerable reading for all groups, and also covering topics of varying interest where the reading varied concomitantly. There remain now to examine two important groups of evidence: (1) data covering the topics of low interest where the reading done was considerable; and (2) data covering topics of generally high interest where the amount of reading on corresponding titles was insignificant.

Widely read titles representing topics of relatively low interest.—Of the 124 titles on the check-list, there are six on which a relatively large amount of reading was reported, but which represent topics of relatively low rank in interest. The titles and the topics represented are:

Beebe, *Beneath tropic seas*
Ludwig, *Son of man*
Merriam, *Chicago*

66. Marine life
10. Educators and religious leaders
17. Problems of city government

Merz, <i>Great American bandwagon</i>	69. Comments on modern America
Russell, <i>Marriage and morals</i>	88. Comments on marriage and divorce
Work, <i>Contract bridge for all</i>	111. Hobbies and use of leisure

The Ludwig title, being a biography, may be omitted from special consideration, since the statement made on page 100 would be applicable. This was: "In the field of biography it is probably not enough to say that reading preferences are in terms of certain generalized groupings, such as 'People of legend and history,' 'Statesmen and politicians,' 'Artists and musicians,' etc. The motivating influence would more likely be the individual whose life is written about." Thus, the life and personality of Jesus must be taken into consideration in accounting for the popularity of this book, although the author's reputation and the amount of publicity the book received were no doubt contributory. A similar explanation may be used to account for the popularity of another title on the list: Work's *Contract bridge for all*. The topic "Hobbies and the use of leisure" does not sufficiently recognize particular hobbies or forms of recreation. Thus in the present instance it is highly probable that if the interest topic were phrased specifically in terms of contract bridge, the interest rating would very closely correspond to the reading score. But here, also, as in the case of Ludwig, the author's reputation was certainly contributory to the book's popularity.

There remain, then, in this group four titles to be considered. In each case a number of factors may be indicated, which tended to discount the fact that the subject matter in the abstract was not of great interest to the readers. Such factors may be named without elaboration.

Beebe, *Beneath tropic seas*

Author's reputation

Readability; style with a distinct literary flavor

Favorable reviews

Publicity

Merriam, *Chicago*

Author's reputation

Subject matter locale

Favorable reviews

- Merz, *Great American bandwagon*
 - Book club selection (Literary Guild)
 - Readability; chapters in form of magazine articles
 - Favorable reviews
 - Publicity
- Russell, *Marriage and morals*
 - Author's reputation
 - Favorable reviews
 - Publicity

Little-read titles representing topics of relatively high interest.—

The final type of data to be considered concern the topics given a high interest rating but on which little or no reading was reported. These topics and corresponding titles on the check-list were as follows:

- 21. International attitudes
 - Arnot, *Soviet Russia and her neighbors*
 - Gibbons, *Nationalism and internationalism*
- 23. Next war
 - Bakeless, *Origin of the next war*
 - Page, *Dollars and world peace*
- 35. Advertising and publicity
 - Calkins, *Business the civilizer*
 - Carpenter, *Dollars and sense*
- 46. Facts and theories of science
 - Eddington, *Nature of the physical world*
 - Jeans, *Universe around us*
- 47. Facts about mankind
 - Clendening, *The Human body*
 - Jennings, *Biological basis of human nature*
- 56. Personal hygiene
 - Emerson, *Diagnosis of health*
 - Fishbein, *An hour on health*
- 59. Personal qualities analyzed
 - Kunkel, *Let's be normal*
 - Roback, *Psychology of character*
- 62. Successful life
 - Pitkin, *Psychology of happiness*
 - Stoddard, *Luck, your silent partner*
- 76. Interesting places abroad
 - Bonsels, *An Indian journey*
 - Mead, *Coming of age in Samoa*

- 79. Interesting places in the United States
Duffus, *The New York of the future*
- 89. Eugenics and birth control
Tenenbaum, *Riddle of sex*
Sanger, *Motherhood in bondage*
- 93. College and higher education
Kelly, *Effective college*
Little, *Awakening college*
- 106. Music (ranked high by all women groups)
Parry, *Evolution of the art of music*
Rosenfeld, *American music*
- 108. Theater (ranked high by all women groups)
Cheney, *The Theatre*
Nathan, *Art of the night*
- 114. Successful marriage
Binkley, *What is right with marriage*
Collins, *The Doctor looks at marriage and medicine*

There are fifteen topics in the above list, and, except in three cases which have already been discussed on pages 93 and 94 the insignificant amount of reading in the corresponding books can be understood without difficulty, even when their potential appeal—that is, the fact that they deal with topics which in the abstract are of relatively great interest—is recognized. The representative titles were not extensively advertised, and in several instances they were considerably out-of-date. Many of the authors were not widely known. Since most of the titles were not widely reviewed, evidence concerning their readability is not available. It will be remembered that reviewer's opinions were used as the criterion of readability.

Comparison of the reading of two titles by the same group.—Thus far the analysis has very largely consisted of comparing the reading by two groups of the same title. It was possible also to compare the reading of two titles by the same group, the titles representing topics differing widely in group interest. Such comparisons, however, were not made, for the reason that so many factors contribute to a book's popularity that to attempt an interpretation based on the mere record of reading would be misleading. A single example will make this clear. The mean score on Lippmann's *Preface to morals* for the junior women is

.61 $\pm$.06, and on Ludwig's *Son of man* it is .21 $\pm$.05. The difference in the mean scores is significant, being .40 $\pm$.08. The topics represented by these two titles are respectively 97, "Religion and the world today," ranked for interest in the third tenth by this group, and 10, "Educators and religious leaders," ranked in the seventh tenth. This would seem to indicate a significant relationship between interest and actual reading, but as soon as a third title is introduced, the lack of certainty of this position becomes apparent. Haydon's *Quest of the ages*, which is classified also under topic 97, "Religion and the world today," had a mean score for the junior women of .17 $\pm$.04. This score is actually lower than Ludwig's, but not significantly so. The point, however, is that when Haydon, instead of Lippmann, is taken to represent Topic 97, the relationship between interest and reading is not at all obvious. The answer, of course, must be sought in the relative amount of advertising given the Haydon and Lippmann books, the difference in the author's reputations, the variations in style and readability, relative accessibility, etc.

SUMMARY

The evidence presented with respect to reading is in general suggestive rather than conclusive. The data on reading, limited as they are to relatively few titles, are useful in formulating hypotheses and new problems, and in indicating further lines of investigation. At this point the relationships between interest and reading which have been pointed out may be summarized:

(1) Books representing topics of high interest to all groups were widely read, when such titles were widely advertised, made readily accessible, were readable from the standpoint of style, and were written by reputable authors. Any one of these factors, or a combination of several such factors, must supplement interest if the book is to be widely read. Exceptions to this conclusion may be accounted for in terms of factors peculiar to specific groups (compare discussion of Eddington and Jeans, above).

(2) Sex differences in interest are carried over to actual reading, even though other factors are constant.

(3) Books representing topics of relatively low interest were also widely read when the factors named in (1) were present. Until such factors are held constant for the group examined, it would be premature to evaluate the interest factor for diagnostic or predictive purposes. In this investigation the evidence is too fragmentary to permit an evaluation. Furthermore, it must be remembered that the reading of books only has been compared with indications of interest. Until comparisons between interest and magazine and newspaper reading have been made, whatever conclusions are drawn must be limited to the particular medium used as a source of information with respect to reading.

(4) The first thirteen topics of the interest check-list, which comprise the section on biography, are not altogether reliable for predicting book reading. The evidence indicates women's preferences for the biographical form, regardless of content, although the factors named in (1) must be present. Whether the biographical section of the interest check-list is reliable for predicting newspaper and magazine reading remains unanswered.

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